**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listing, of claims in the application:

**Listing of Claims:**

1. (previously presented) A method of transmitting time division multiplexed data from a satellite terminal to a satellite, said method comprising:

providing said satellite terminal with at least one command that allocates to said satellite terminal a number of timeslots within each of at least one frame for data transmission, said command identifying said number of allocated timeslots in a first order; and

converting said timeslots identified by said command to corresponding timeslot locations within each frame in a second order in accordance with a timeslot reordering scheme to distribute said allocated timeslots throughout each frame, the second order comprising a non-sequential order within the at least one frame.

2. (previously presented) The method as claimed in claim 1, further comprising selecting said timeslot reordering scheme to distribute data from respective satellite terminals to different timeslots throughout each frame.

3. (previously presented) The method as claimed in claim 1, wherein said converting is performed by said satellite terminal.

4. (previously presented) The method as claimed in claim 1, wherein said providing comprises:

receiving a request for bandwidth at said satellite from said satellite terminal;

processing said request to determine an allocation of timeslots within each frame for said satellite terminal to transmit said data;

generating said command to indicate said timeslots allocated to said satellite terminal in said first order; and

transmitting said command to said satellite terminal.

5. (currently amended) A bandwidth on demand apparatus in a communication system comprising:

a processor operable to generate commands that allocate a plurality of channels among terminals, said terminals being operable to process said commands and use said channels in accordance with said allocations;

a receiver for receiving bandwidth requests from said terminals requesting use of said channels for transmission of terminal traffic comprising at least one of audio, video ~~and~~ or data; and

a transmitter for transmitting said commands to said terminals;

wherein said processor allocates each of said channels as one of a an unreserved contention channel ~~and~~ or a reserved data channel, said unreserved contention channels allowing said terminals to transmit said bandwidth requests, said reserved data channels allowing said terminals to transmit said terminal traffic, said processor dynamically changing said allocation of at least one channel from a reserved data channel to a an unreserved contention channel depending on an amount of bandwidth requests pending at any given time.

6. (currently amended) A bandwidth on demand apparatus as claimed in claim 5, further comprising a plurality of queues connected to said processor, wherein said processor writes to and reads from said queues, stores said bandwidth requests in said queues, and allocates said channels as reserved data channels in accordance with said bandwidth requests stored in said queues.

7. (original) A bandwidth on demand apparatus as claimed in claim 5, wherein said channels correspond to timeslots in frames, said processor being operable to allocate said timeslots in accordance with said bandwidth requests and a bandwidth allocation algorithm and to generate said commands accordingly, and said terminals being operable to process said commands and use said timeslots in accordance therewith.

8. (currently amended) A bandwidth on demand apparatus as claimed in claim 5, wherein at least a selected minimum number of said plurality of channels are configured as said unreserved contention channels. col. 9, lines 10-11, 27-29

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9. (original) A bandwidth on demand apparatus as claimed in claim 5, wherein said processor is further operable to generate and transmit a signal via said transmitter to one of said terminals, to which selected ones of said channels have been allocated, indicating that a channel release request from said one terminal to release said selected channel allocations has been processed, said one terminal being provided with a timer and being programmable to wait until said timer expires before transmitting another one of said bandwidth requests.

10. (currently amended) A bandwidth on demand apparatus as claimed in claim 5, wherein one of said terminals transmits one of said bandwidth requests via one of said unreserved contention channels, and transmits other bandwidth requests subsequent to receiving channel allocations in response to said one bandwidth request as inband messages via allocated reserved data channels.

11. (currently amended) In a bandwidth on demand communication system, wherein channels correspond to timeslots in frames with some of said channels being designated for bandwidth requests comprising at least rate requests and volume requests, said rate requests each being a request for a selected number of said timeslots in each of said frames and each of said rate requests being characterized as one of high priority ~~and~~ or (and) low priority, said volume requests each corresponding to a request for a selected number of said timeslots to send a selected amount of terminal traffic, said terminal traffic comprising at least one of data, audio, ~~and~~ or (and) video, and each of said volume requests being characterized as one of high priority ~~and~~ or low priority, and wherein said communication system includes terminals that are operable to transmit said bandwidth requests, a processing device for providing channel allocations comprising,

a first queue and a second queue, said processing device storing said high priority rate requests in said first queue and allocating a selected number of said timeslots in each of said frames to each of said high priority rate requests stored in said first queue, and storing said low priority rate requests in said second queue and allocating a selected number of said timeslots in each of said frames to each of said low priority rate requests stored in said second queue, the sum of the number of said timeslots in each of said frames allocated to said rate requests stored in said first and second queues not exceeding a total number of timeslots in each of said frames, allocation of said timeslots to said rate requests stored in said second queue being preempted for at least one frame by allocation of said timeslots to said rate requests stored in said first queue for said at least one frame; and

a third queue and a fourth queue, said processing device storing said high priority volume requests in said third queue and storing said low priority volume requests in said fourth queue, said high priority volume requests and said low priority volume requests being preempted for at least one frame by allocation of said timeslots to ~~at least one of said~~ rate requests stored in said first queue and said rate requests stored in said second queue.

12. (canceled).

13. (currently amended) A processing device as claimed in claim 11, wherein said volume requests stored in said fourth queue are preempted for at least one frame by allocation of said timeslots to at least one of said rate requests stored in said first queue, said rate requests stored in said second queue ~~and~~ or said volume requests stored in said third queue.

14. (previously presented) A processing device as claimed in claim 11, wherein said processing device is programmable to allocate said timeslots in each of said frames to said volume requests stored in said third queue and stored in said fourth queue on a round-robin basis to allow said volume requests a substantially equal opportunity to be allocated bandwidth.

15. (previously presented) A processing device as claimed in claim 11, wherein said processing device is operable to assign said timeslots to as many of said volume requests stored in said third queue and said fourth queue as possible in lieu of providing said terminals requesting said bandwidth all of said channels that are available at that time and to continue to store said volume requests in respective ones of said third queue and said fourth queue until the requests for said bandwidth have been allocated.

16. (currently amended) A method of transmitting channels in a bandwidth on demand communication system wherein channels correspond to timeslots in frames and the system comprises a number of uplink cells within which terminals transmit signals using at least one of said channels, said method comprising:

controlling the use of each of said channels by said terminals, said terminals being operable to transmit bandwidth requests to send terminal traffic comprising at least one of data, audio ~~and~~ or video, said plurality of channels each being useful as one of a contention channel ~~and~~ or a data channel, said contention ~~channel~~ channels allowing said terminals to transmit said bandwidth requests, said data channels allowing said terminals to transmit said terminal traffic,

said channels being allocated in accordance with said bandwidth requests and transmitted to said terminals in a subsequent one of said frames, said terminals being operable to adjust power for transmission of said bandwidth requests and said terminal traffic using an initial power condition; and

transmitting said contention channels in adjacent and isolated ones of said uplink cells as cofrequency channels to reduce interference of said contention channels with said data channels.

17. (currently amended) A method of performing bandwidth allocations, the method comprising:

receiving a bandwidth request from a terminal over a communication channel, the bandwidth request specifying a desired number of transmission slots of a frame;

determining allocation of the transmission slots of the frame based upon the received bandwidth request;

distributing the allocated transmission slots throughout the frame according to a prescribed sequence; and

selectively sending an allocation command identifying the allocated transmission slots to the terminal based upon the distributing, the allocation command including a slot numbering identifier identifying one of a plurality of slot numbering patterns, wherein the terminal determines actual transmission slots to use based on a number of allocated transmission slots and the slot numbering identifier and wherein the number of allocated transmission slots and the slot numbering identifier do not identify the actual transmission slots to be used by the terminal.

18. (currently amended) The method as claimed in claim 17, wherein the bandwidth request ~~in the receiving step~~ is at least one of a rate request ~~and~~ or a volume request, the rate request specifying a constant number of transmission slots, the volume request specifying a specific number of transmission slots.

19. (previously presented) The method as claimed in claim 18, further comprising:

receiving a follow-up request from the terminal, the follow-up request being associated with the volume request and specifying additional desired transmission slots; and

selectively discarding the follow-up request based upon traffic load.

20. (previously presented) A method of performing bandwidth allocations, comprising:

receiving a bandwidth request from a terminal over a communication channel, the bandwidth request specifying a desired number of transmission slots of a frame;

determining allocation of the transmission slots of the frame based upon the received bandwidth request;

distributing the allocated transmission slots throughout the frame according to a prescribed sequence; and

selectively sending an allocation command identifying the allocated transmission slots to the terminal based upon the distributing, wherein the bandwidth request has a time stamp that indicates a time of receipt of a previous allocation command, and the determining includes:

comparing the time stamp with an allocation timer value to determine whether the time stamp exceeds the allocation timer value; and

selectively discarding the bandwidth request based upon the comparing.

21. (previously presented) The method as claimed in claim 18, wherein the bandwidth request is a rate request requesting a first number of transmission slots, the method further comprising:

placing the rate request in a queue;

receiving another bandwidth request that is a rate request associated with a fallback rate, the fallback rate requesting a different number of transmission slots of the frame than the first number of transmission slots; and

discarding the queued rate request.

22. (previously presented) The method as claimed in claim 18, wherein the rate request and the volume request each has two levels of priority.

23. (currently amended) The method as claimed in claim 22, further comprising:

placing the bandwidth request in a queue, the queue being designated as one of at least a high priority rate request queue, a low priority rate request queue, a high priority volume request queue, ~~and~~ or and a low priority volume request queue, wherein the rate request queues are of higher priority than the volume request queues.

24. (previously presented) The method as claimed in claim 23, wherein the volume request queues are round robin queues.

25. (previously presented) The method as claimed in claim 23, further comprising:

reserving a minimum number of transmission slots for the low priority volume request queue.

26. (previously presented) The method as claimed in claim 17, the method further comprising:

receiving another bandwidth request from the terminal, the other bandwidth request being received using a previously allocated transmission slot.

27. (currently amended) The method as claimed in claim 17, wherein the frame ~~in the receiving step~~ is a TDMA (Time Division Multiple Access) frame.

28. (currently amended) The method as claimed in claim 17, wherein the communication channel ~~in the determining step~~ is at least one of a data channel ~~and~~ or a contention channel.

29. (currently amended) A method of communicating over a satellite communication system, the method comprising:

transmitting a bandwidth request to a satellite over a communication channel, the bandwidth request specifying a desired number of transmission slots of a frame; and

receiving an allocation command from the satellite that is configured to:

determine allocation of the transmission slots of the frame based upon the received bandwidth request,

distribute the allocated transmission slots throughout the frame according to a prescribed sequence, and

transmit an allocation command that includes an identifier identifying one of a plurality of slot numbering patterns, wherein the allocation command does not identify actual transmission slots that will be used.

30. (currently amended) The method as claimed in claim 29, wherein the bandwidth request is one of a rate request ~~and~~ or a volume request, the rate request specifying a constant number of transmission slots, the volume request specifying a specific number of transmission slots.

31. (previously presented) The method as claimed in claim 30, further comprising:

transmitting a follow-up request to the satellite, the follow-up request being associated with the volume request and specifying additional desired transmission slots, wherein the satellite selectively discards the follow-up request based upon traffic load.

32. (previously presented) A method of communicating over a satellite communication system, the method comprising:

transmitting a bandwidth request to a satellite over a communication channel, the bandwidth request specifying a desired number of transmission slots of a frame; and

receiving an allocation command from the satellite that is configured to:

determine allocation of the transmission slots of the frame based upon the received bandwidth request, and

distribute the allocated transmission slots throughout the frame according to a prescribed sequence, wherein the request has a time stamp that indicates a time of receipt of a previous allocation command, and the determining includes:

comparing the time stamp with an allocation timer value to determine whether the time stamp exceeds the allocation timer value; and

selectively discarding the request based upon the comparing.

33. (previously presented) The method as claimed in claim 30, wherein the bandwidth request is an original rate request, the method further comprising:

transmitting another bandwidth request that is a rate request associated with a fallback rate and superseding the original rate request, the fallback rate requesting a different number of transmission slots of the frame than the original rate request.

34. (previously presented) The method as claimed in claim 30, wherein the rate request and the volume request each has two levels of priority.

35. (previously presented) The method as claimed in claim 29, the method further comprising:

piggybacking a follow-up request to the satellite, the follow-up request being associated with the volume request and specifying additional desired transmission slots.

36. (currently amended) The method as claimed in claim 29, wherein the frame ~~in the transmitting step~~ is a TDMA (Time Division Multiple Access) frame.

37. (currently amended) The method as claimed in claim 29, wherein the communication channel ~~in the transmitting step~~ is one of a data channel ~~and~~ or a contention channel.

38. (currently amended) A communication system for performing bandwidth allocations, the system comprising:

a plurality of queues configured to store a bandwidth request received from a terminal over a communication channel, the bandwidth request specifying a desired number of transmission slots of a frame; and

a bandwidth control processor communicating with the plurality of queues, the bandwidth control processor being configured to determine allocation of the transmission slots of the frame based upon a received bandwidth request that is stored in one of the plurality of queues, to distribute the allocated transmission slots throughout the frame according to a prescribed sequence, and to selectively send an allocation command identifying the allocated transmission slots and one of a plurality of slot numbering patterns to the terminal, wherein the allocation command does not identify actual transmission slots that will be used by the terminal.

39. (currently amended) The system as claimed in claim 38, wherein the bandwidth request is one of a rate request ~~and~~ or a volume request, the rate request specifying a constant number of transmission slots, the volume request specifying a specific number of transmission slots.

40. (previously presented) The system as claimed in claim 39, wherein a follow-up request from the terminal is stored in one of the plurality of queues, the follow-up request being associated with the volume request and specifying additional desired transmission slots, the bandwidth control processor being selectively configured to discard the follow-up request based upon traffic load.

41. (previously presented) A communication system for performing bandwidth allocations, comprising:

a plurality of queues configured to store a bandwidth request received from a terminal over a communication channel, the bandwidth request specifying a desired number of transmission slots of a frame; and

a bandwidth control processor communicating with the plurality of queues, the bandwidth control processor being configured to determine allocation of the transmission slots of the frame based upon a received bandwidth request that is stored in one of the plurality of queues, to distribute the allocated transmission slots throughout the frame according to a prescribed sequence, and to selectively send an allocation command identifying the allocated transmission slots to the terminal, wherein the request has a time stamp that indicates a time of receipt of a previous allocation command by the terminal, the bandwidth control processor being configured to compare the time stamp with an allocation timer value to determine whether the time stamp exceeds the allocation timer value, and to selectively discard the request based upon the determination.

42. (previously presented) The system as claimed in claim 39, wherein the plurality of queues store at least two rate requests, one of the stored rate requests being associated with an original rate, another one of the stored rate requests being associated with a fallback rate requesting a different number of transmission slots of the frame than the original rate, the bandwidth control processor discarding the one rate request associated with the original rate.

43. (previously presented) The system as claimed in claim 39, wherein the rate request and the volume request each has two levels of priority.

44. (currently amended) The system as claimed in claim 39, wherein the plurality of queues ~~being~~ are designated respectively as a high priority rate request queue, a low priority rate request queue, a high priority volume request queue, and a low priority volume request queue, the rate request queues being of higher priority than the volume request queues, the volume request queues being round-robin queues, the bandwidth control processor reserving a minimum number of transmission slots for the low priority volume request queue.

45. (previously presented) The system as claimed in claim 38, wherein the plurality of queues store another bandwidth request from the terminal, the other bandwidth request being received using a previously allocated transmission slot.

46. (previously presented) The system as claimed in claim 38, wherein the frame is a TDMA (Time Division Multiple Access) frame.

47. (currently amended) The system as claimed in claim 38, wherein the communication channel is one of a data channel ~~and~~ or a contention channel.

48. (previously presented) The method of claim 17, wherein the plurality of slot numbering patterns comprises four slot numbering patterns.

49. (previously presented) The method of claim 29, wherein the plurality of slot numbering patterns comprises four slot numbering patterns.

50. (previously presented) The communication system of claim 38, wherein the plurality of slot numbering patterns comprises four slot numbering patterns.